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The George Washington University

School of Government

Navy Graduate Comptrollership Course

A RESUME OF ESSENTIAL PRINCIPLES OF ORGANIZATION

prepared by

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for

Dr. A. Rex Johnson

Seminar in Comptrollership

FOREWORD

The discussion which follows is a brief resumé of essential principles of organization which are inherent in the framework, operation and structure of a going organization. The effort entailed in preparation of this document has been predominately an effort in self-enlightenment. For the past several years the writer has been associated with matters and problems of organizational effectiveness. During this time there has been reference on numerous occasions to principles of organization or to violation of principles of good organization. What are these principles to which reference is so frequently made? Do they exist? Are they finite and well defined? Do they have body and authority, and are they generally accepted? Or on the other hand are they intangible, abstract and ill defined? The discussion which follows, even though brief and inconclusive, is the result of a review of that which is allegedly the best and most authoritative in this field and is an attempt to define and correlate those matters upon which there is substantial agreement. Admittedly the field is broad; there is, however, agreement as to certain precepts. There is also some disagreement as to the definition, identity, grouping and application of these principles. An effort is made herein to indicate what recognized authorities have to say about these principles. Little attempt is made, except in conclusion, to treat the application of these principles.

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CHAPTER I

INTRODUCTION

A principle has been defined as a fundamental truth, as a generally accepted law or doctrine, or as a settled rule of action. Organization also has been variously defined. Most definitions imply that organization has at least two elements: (1) that of group effort; and (2) that of effort which is coordinated. One author states that organization is required even for two men to move a large stone.¹

Brown defines organization as,

... that part which each member of an enterprise is expected to perform and the relations between such members, to the end that their concerted endeavor shall be most effective for the purpose of the enterprise.²

Mooney states,

... organization is the form of every human association for the attainment of a common purpose.³

Gillmor states,

... any human association with a common purpose is an organization.⁴

An organization may be considered to be a structure which defines the responsibilities of members and the relations which exist between them. In

¹James D. Mooney, The Principles of Organization (New York: Harper and Brothers, 1947), p. 5.

²Alvin Brown, Organization - A Formulation of Principle (New York: Hibbert Printing Company, 1945), p. 6.

³Mooney, op. cit., p. 1.

⁴R. E. Gillmor, A Practical Manual of Organization, Sec. 1, Book 4 of Reading Course in Executive Technique, ed. Carl Heyel (New York: Funk & Wagnalls Company, 1948), p. 1.

1. INTRODUCTION

1.1. MOTIVATION

Starting a new company is an exciting and challenging activity. It requires a lot of effort, passion, and dedication to make it a success. In this paper, we will introduce our research question and its background, and then propose two main (1) and secondary goals for each (1). Moreover, we will introduce more details of methodology and design with the main contributions of this paper.

1.2. RELATED WORK

Our approach of building a new company is the same as that of a startup. We will use a problem-solving methodology and our methodology consists of three main steps: (1) problem definition, (2) problem solving, and (3) problem validation.

1.3. CONCLUSION

This paper introduces our research question and its background, and then proposes two main goals for each (1).

1.4. REFERENCES

Our research question is to build a new company with the same methodology as that of a startup. We will use a problem-solving methodology and our methodology consists of three main steps: (1) problem definition, (2) problem solving, and (3) problem validation. The main contributions of this paper are (1) to propose a new methodology for building a new company, and (2) to propose a new methodology for solving a problem. The main contributions of this paper are (1) to propose a new methodology for building a new company, and (2) to propose a new methodology for solving a problem.

1.5. ACKNOWLEDGEMENT

This paper is supported by the National Research Foundation of Korea (NRF) and the Ministry of Science and Technology (MEST) under Grant MEST-2009-0001212.

a sense organization is the formulation of a machine through which administration and management achieve a sought-for end. It is very difficult to isolate the structure of the machine from the operation of the machine and as a consequence most authors in this field are concerned with the functioning of this machine as well as with the principles involved in the formation of the structure.

Although coordinated effort has existed since time immemorial it has not been until recently, comparatively speaking, that any complete or orderly attempt has been made to isolate and define the principles which are inherent in organization.

Mooney has made an exhaustive study of governmental, military, ecclesiastical and industrial organization in an effort to find underlying principles or precepts applicable to all forms of organization. He lists three basic principles: (1) the coordinative; (2) the scalar; and (3) the functional. Each of these basic principles is further subdivided into subordinate principles for a total of nine identifiable principles.⁵

Brown, a frequently quoted authority in this field, lists and describes in a specific manner ninety-six separate principles of organization.⁶ Follett, who looks at organization in terms of coordination and control, lists four fundamental principles of organization all dealing with some phase of coordination of group effort. She makes two interesting observations about control and coordination. First, that control is coming more and more to mean fact-control rather than man-control and, second, that central control is coming more and more to mean the correlation of many controls rather than one superimposed control. Her views deal primarily with large industrial

⁵Mooney, op. cit., pp. 5-32.

⁶Brown, op. cit., pp. 255-264.

organizations and the specific matter of coordination of group effort rather than with any underlying principles of cause and effect.⁷

Fayol, a famous French industrialist and student of organization, responsible for creating great interest in the need for study of administration and organization in a scientific manner, was primarily interested in the administration and the analysis of business and industrial operation in terms of functions. While his interest in principles may have been secondary his authoritative work lists twelve administrative principles and sixteen administrative duties.⁸

Taylor, in addition to being considered a pioneer in the field of scientific management and time and motion study, was also a student of organization and dealt at length with the organizational principles of specialization and functionalism.⁹ Graicunas, a French management consultant, although interested in principles of organization in general, was specifically concerned with the "span of control" and his "Relationships in Organization" is widely accepted as an authoritative treatment of this principle.¹⁰

In addition to the authorities who have been concerned, in part or in entirety, with principles of organization in a pure or theoretical sense, there are a number of authors who have discussed these matters in terms of

⁷ Mary Parker Follet, "The Process of Control," Papers on the Science of Administration, ed. by Luther Gulick and L. Urwick (3d ed.; New York: Institute of Public Administration, 1954), Part VIII, pp. 161-169.

⁸ Henri Fayol, Industrial and General Administration, cited in L. Urwick, The Elements of Administration (New York: Harper and Brothers, 1943), p. 19.

⁹ Frederick W. Taylor, Shop Management (New York: Harper and Brothers, 1911).

¹⁰ V. A. Graicunas, "Relationships in Organization," Papers on the Science of Administration, ed. by Luther Gulick and L. Urwick (3d ed.; New York: Institute of Public Administration, 1954), Part X, pp. 183-187.

analysis and correlation from either an academic or practical point of view.

Urwick, an author and lecturer in the field of organization, made a detailed analysis and comparison of the work of various authors in this area and lists a total of fifty-eight elements or principles of organization and administration.¹¹ Another author and recognized authority in this field is Gulick, who in company with Urwick edited Papers on the Science of Administration.¹² While this book is primarily a compilation of best readings in the field and no new principles are evolved, existing and recognized principles are very ably discussed. Gillmor's A Practical Manual of Organization is a statement of principles and a discussion of their application in modern industry.¹³ In addition to the individuals mentioned there is a host of other authors, educators, military men, management consultants, and business-men who have discussed the principles of organization.

There is a wealth of information available in this field. In many areas there is substantial agreement as to what constitutes a principle; in others there is a lack of agreement and consonance as to what principles are. Perhaps the difference is the result of various approaches or objectives of the authors. In part it is occasioned by the breadth or limits which are ascribed to a principle. To find such disagreement and latitude in an institution so pervasive and ancient is a source of some dismay. There is, however, a substantial body of agreement among recognized authorities. The discussion which follows has been a problem primarily in the isolation and grouping of principles which appear to overlap and to be abstract. The

¹¹L. Urwick, The Elements of Administration (New York: Harper and Brothers, 1943), pp. 119-129.

¹²Luther Gulick and L. Urwick (ed.), Papers on the Science of Administration (3d ed.; New York: Institute of Public Administration, 1954).

¹³Gillmor, op. cit., 58 pp.

subsequent arrangement is arbitrary for the reason that the best authorities themselves are not in complete agreement as to how the field may be divided. The principles which are discussed hereafter are those which appear to be pre-eminent.

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CHAPTER II

PRINCIPLES OF ORGANIZATION

Authority and Responsibility

Any discussion of the principles of organization has as its genesis the elements of authority and responsibility. While the two terms are distinct they are inseparably linked. Authority is the legal power to command. Authority implies two elements--that of legal jurisdiction and that of ability to command or to direct. Responsibility comes from the word "response," and connotes the assumption of a duty to respond and the assumption of accountability for the performance of assigned responsibility. Authority and responsibility are both inherent in group efforts.

Petersen and Plowman have the following to say of authority as it applies to business organization.

In authority lies the origin of leadership and the right by which it is exercised. In all business enterprises the presence and effect of authority are identical in kind, though variable in scope and degree. By reason of its pervasiveness as well as its indispensability, authority can properly be recognized as a principle. Authority in a business organization is the right to perform certain organic functions of management. When these organic functions are reduced to their essential elements the right of executive authority divides itself into six categories or elements. These are the rights to plan, to decide, to organize, to command, to enforce and to coordinate.¹⁴

Petersen and Plowman discuss responsibility in these terms.

In civilized society it is recognized that every right carries with it an associated obligation or duty. The elements of authority are rights and powers. It follows, then, that the delegation of authority to managerial executives imposes obligations as well. Such obligations are

¹⁴ Elmore Petersen and Grosvenor E. Plowman, Business Organization and Management (Chicago: Richard D. Irwin, Inc., 1949), p. 66.

called "responsibilities." Since responsibility is coextensive with authority, it, too, may be recognized as a principle. Responsibility may be defined as "the obligation and the duty of compliance and obedience."¹⁵

Authority and responsibility are omnipresent in every form of concerted effort and are the sinews of organization. These elements exist in the organization of a ship, a business enterprise, a symphony orchestra or in a football team. They likewise exist in individual forms of endeavor such as driving a bus, delivering a newspaper, or teaching school. Much has been written about these principles, and there is substantial agreement as to their existence and application.

Mooney deals with authority and responsibility under his first principle which he calls "coordination."

Coordination, therefore, is the orderly arrangement of group efforts, to provide unity of action in the pursuit of a common purpose. As coordination is the all inclusive principle of organization it must have its own principle and foundation in authority, or the supreme coordination power. Always, in every form of organization, this supreme authority must rest somewhere, else there would be no directive for any coordinated effort.¹⁶

Brown, who has written at some length about authority and the nature of responsibility, seems to be chiefly concerned with the responsibility which is engendered by a grant of authority and the intimate and necessary relationship which exists between the two. He views responsibility in a dual sense. On the one hand, it denotes the definition of a part or role to be performed. On the other, it denotes the obligation for the performance of that part. The concept of Brown in respect to authority and responsibility¹⁷ is dogmatic and specific and can be summarized by the following.

¹⁵Petersen and Plowman, op. cit., p. 69.

¹⁶Mooney, op. cit., pp. 5, 6.

¹⁷Brown, op. cit., Chapter II.

A person clothed with a responsibility must have the means to perform it. Let this means be called authority.

Responsibility cannot exist without the authority to execute it, however much it may purport to do so. Authority is commensurate with responsibility. The reverse - Authority without responsibility, or authority in excess of responsibility - is, of course, equally inconceivable.

Authority is the power of performance of responsibility.

The acceptance of a responsibility creates an equivalent obligation for its performance.

Responsibility inheres exclusively in individuals.

In each responsibility is inherent an equivalent authority.¹⁸

Fayol has this to say about authority and responsibility:

Authority is the right to give orders and the power to exact obedience. Authority is not to be conceived of apart from responsibility, that is apart from sanction. Responsibility is a corollary of authority, it is a natural consequence and essential counterpart and wheresoever an authority is exercised responsibility arises.¹⁹

Urwick discusses authority and responsibility as follows:

To hold a group or individual accountable for activities of any kind without assigning to him or them the necessary authority to discharge that responsibility is manifestly both unsatisfactory and inequitable. It is of great importance to smooth working that at all levels authority and responsibility should be coterminous and coequal.²⁰

A review of what leading authorities have to say about the principles of responsibility and authority indicates continuity and agreement. Perhaps one of the best and most concise bits of advice for an administrator pertaining to authority and responsibility and containing certain minimum essential elements are the following two principles or suggestions.

1. The responsibilities assigned to a unit of an organization should be specifically clear-cut and understood.
2. Responsibility for a function should be matched by the authority

¹⁸Brown, op. cit., pp. 18-24.

¹⁹Fayol, op. cit., p. 20.

²⁰Urwick, op. cit., p. 46.

necessary to perform it.²¹

Functionalism

A basic characteristic of organization is that work is divided. Whenever many individuals are working together best results are obtained when an apportionment of duties and responsibilities exists. Why should this be so? Gulick lists four reasons.

1. Because men differ in nature, capacity and skill.
2. Because one man cannot be in two places at the same time.
3. Because one man cannot do two things at the same time.
4. Because the range of knowledge and skill is so great that a man cannot within his life-span know more than a small fraction of it. In other words it is a question of human nature, time and space.²²

Undoubtedly there are other reasons why work should be divided.

Suffice it to say that division of work or functionalism is an established and primary attribute of organization effort. Mooney, who considered this principle one of a trinity, defines functionalism as "a distinction between kinds of duties" and illustrates this distinction by reference to the distinction between officers of the infantry and officers of the artillery.²³ Brown considers functionalism as a "partition or differentiation of responsibility by quality."²⁴ To Urwick functionalism is a "dividing up of activities as to kinds."²⁵

Petersen and Plowman refer to functionalism as departmentation and state:

²¹Army Service Forces, Control Division, Headquarters, Control Manual, Volume II, Basic Principles of Organization (1943), pp. 1-4.

²²Luther Gulick, "Notes on the Theory of Organization," in Gulick and Urwick, op. cit., Part I, p. 3.

²³Mooney, op. cit., p. 25.

²⁴Brown, op. cit., p. 154.

²⁵Urwick, op. cit., p. 56.

Departmentation is a major principle in the theory of business organization. It may be defined as the "dividing and arranging of the managing and working forces, together with the processes involved, of a business enterprise into specialized units or groups." Departmentation includes the combining of activities for the purpose of harmonious and efficient operation, thus embracing the principles of functionalization and coordination. The purpose of departmentation is three-fold; (1) to specialize executive activity, (2) to simplify the tasks of management, and (3) to group employees for the purpose of direction and control.

.....
The whole principle of departmentation rests upon a foundation of expeditious performance. Therefore by grouping employees under responsible unit heads, each sphere of executive activity is narrowed to limits commensurate with managerial capacity.²⁶

The principle of functionalism although called by other names such as division of work, functional differentiation, or departmentation is a principle of organization which is subject to common acceptance and agreements. Disagreement exists not as to its existence but as to its application. In every form of organization there is an objective or number of objectives, broad or narrow, to which combined effort is directed. Attainment of these objectives requires the performance of many subordinate tasks. Essentially functionalism is a subdivision of the objectives of an organization into many component parts and grouping these related and interdependent activities or tasks into a logical arrangement. At the heart of the principle of functionalism is an interpretation of the word "logical." What appears logical to one individual may appear illogical to another. That which is logical obviously depends on the objectives, the type and size of the enterprise and on many other elements.

Certain authors have been specific as to how functions should be divided and organizationally assigned. Fayol says "we can divide all of the operations which occur in a business organization into the following six groups": (1) Technical operations, (2) commercial operations, (3) financial operations, (4) security operations, (5) accounting operations,

²⁶Petersen and Plowman, op. cit., pp. 200,201.

(6) administrative operations.²⁷

Taylor, who has had a profound effect on modern industrial management, has pronounced ideas about the division of labor. While his views are somewhat extreme it is he who is credited with introducing the term "functional organization." His functional organization has a close relationship to the principles of "span of control" and "specialization." His ideas may be summarized as follows.

Throughout the whole field of management the military type of organization should be abandoned, and what may be called "the functional type" substituted in its place. "Functional management" consists in so dividing the work of management that each man from the assistant superintendent down shall have as few functions as possible to perform. If practicable the work of each man in the management should be confined to the performance of a single leading function.²⁸

The American Management Association in a discussion of the functional assignment of duties and of authority and responsibility necessary for accomplishment have this to say.

The functions or job contents necessary to reach objectives must be defined. This step is governed by two precepts. (1) Define duties clearly. (2) The work of each man in the management should be confined to the performance of a single leading function.²⁹

The ideas of Taylor in respect to complete emphasis on a detailed division of work by function have not been universally accepted. He visualized the operation of a shop as requiring the performance of eight functions and an individual working in a shop would have eight different functional bosses dependent upon the function being performed at a particular time. Obviously it is with difficulty and confusion that one workman can serve

²⁷ Henri Fayol, Industrial and General Administration, cited in Ralph C. Davis, The Fundamentals of Top Management (New York: Harper and Brothers, 1951), p. 154.

²⁸ Taylor, op. cit., p. 99.

²⁹ Ernest Dale, Planning and Developing the Company Organization Structure (Research Report No. 20, American Management Association [New York, 1952]), p. 141.

the following sections as further evidence, a fact not yet fully understood and which could be explained from the present knowledge and the latest available publications. It is not to be denied that with an adequate knowledge of the anatomical structure of the heart and the heart-lung system, the physician can make a diagnosis and treatment of congenital heart disease. The following sections will be devoted to the heart and the heart-lung system, and the last section will be devoted to the heart-lung system.

It is well established that the heart and the heart-lung system are closely related. The heart is the primary organ of the circulatory system, and the lungs are the primary organs of the respiratory system. The heart and the lungs are closely related, and the heart-lung system is the primary organ of the circulatory and respiratory systems. The heart-lung system is the primary organ of the circulatory and respiratory systems, and the heart-lung system is the primary organ of the circulatory and respiratory systems.

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eight different masters.

A number of other authors have discussed the matter of assignment of functions. The following comments are representative.

Define duties clearly.³⁰

No function should be assigned to more than one independent unit of an organization. Overlapping responsibility will cause confusion and delay.³¹

When a member of an organization is placed in a position with duties ill defined in their relation to other duties what happens? Naturally he attempts to make his own interpretation of those duties and, where he can, to impose this view on those about him. In this process he encounters others in similar cases, with friction and lack of coordination as the inevitable result.³²

Functionalism in essence is a division, classification and grouping of the essential tasks which an organization must perform to attain objectives. To this writer it appears that there are two attributes of this principle which should be recognized in its application.

1. The manner in which work is divided among components of an organization should not be a matter of happenstance. Functions should be assigned to component parts of an organization as the result of careful deliberation and in terms of logic and consistency.
2. There are a number of criteria which may be used in determining how functions may be assigned. Some of these criteria include the following: the objective or purpose to be attained, the function, the size of the organization, unity of purpose, association, competition, executive interest, the degree of kindredness or dissimilarity from other assigned functions, coordination, policy control, skill required, skill available, essentiality, the product, the process, geography, customers, volume of work or work schedule.

³⁰ Henri Fayol, Industrial and General Administration, cited in Urwick, op. cit., p. 54.

³¹ Army Service Forces, Control Division, op. cit., p. 2.

³² Mooney, op. cit., pp. 29-30.

the more widespread use of the term 'magnetism' among subsequent writers, and the preference of some of the earlier ones for 'electromagnetism'.

principles. The problem is that, although it is a source of motivation, a sense of control over one's own life is not enough to overcome the difficulties of life.

The Scalar Principle

The scalar principle or the scalar or scaliform process as it is sometimes called is a principle which is as old as the hills and which exists in every form of organization. This principle refers to the delegation of authority and responsibility downward through a series of steps or levels in pyramidal fashion from the top source of authority throughout the organization. A classic illustration which is frequently used to explain the operation of the principle is taken from the book of Exodus. According to the biblical reference, Moses was leading the children of Israel through the wilderness and was staggered by the burden of governing and judging, in his own person, all the people. Moses turned to his father-in-law, Jethro, for advice. Jethro observed his methods, saw what was wrong and said:

... The thing that thou does is not good. Thou wilt surely wear away, both thou, and this people that is with thee; thou art not able to perform it thyself alone. . . . So Moses chose able men out of all Israel, and made them heads over the people, rulers of thousands, rulers of hundreds, rulers of fifties and rulers of tens. And they judged the people at all seasons: the hard cases they brought unto Moses, but every small matter they judged themselves.³³

Origin of the term, scalar, is obscure. Mooney has treated the principle at some length and points out that the scalar principle is the same form in organization that is sometimes called hierachial.

The common impression regards this scale or chain merely as a "type" of organization, characteristic only of the vaster institutions of government, army, church and industry. This impression is erroneous. It is likewise misleading, for it seems to imply that the scalar chain in organization lacks universality. These great organizations differ from others only in that the chain is longer. The truth is that wherever we find an organization even of two people, related as superior and subordinate, we have the scalar principle.³⁴

The exception principle which was expounded by Taylor is very closely

³³Exod. 18: 17-26.

³⁴Mooney, op. cit., pp. 14-15.

related to, if not identical with, the scalar principle and the delegation of responsibility which is implicit in the process.

It is not an uncommon sight, though a sad one, to see the head of a large business fairly swamped at his desk with an ocean of reports and letters, on each of which he thinks he should put his initials or stamp. He feels that by having this mass of detail pass over his desk he is keeping in close touch with the entire business. The exception principle is the very reverse of this, leaving him free to consider the broader lines of policy and to study the character and fitness of the more important men under him.³⁵

At another point Taylor in expanding the exception principle states as follows:

The manager should receive only condensed, summarized, and invariable comparative reports, covering, however, all of the elements entering into the management, and even these summaries should be carefully gone over by an assistant before they reach the manager, and have all the exceptions to the past averages or to the standards pointed out, both the especially good and the especially bad exceptions, thus giving him in a few minutes a full view of the progress which is being made or the reverse.³⁶

The scalar principle in operation appears to be a process which is universal and applies to every organization large or small. Effort is co-ordinated and passed downward in a series of steps in scale fashion. Essentially it refers to the horizontal layers of supervision in an organization. While this process is closely related to the matter of delegation, a distinction is made between the two by most authors. The scalar principle is a basic concept which concerns a process or method which is universally accepted, which is as old as history itself and which explains the basic organizational facts of life as regards its composition, method of operation and internal arrangement.

³⁵Taylor, op. cit., p. 126.

³⁶Taylor, op. cit., p. 126.

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The Span of Control

Span of control is a principle of organization which serves to restrict the number of individuals reporting directly to a single superior to a number which can be effectively coordinated and directed by one person. As Gulick states:

Just as the hand of a man can span only a limited number of notes on the piano, so the mind and will of a man can span but a limited number of immediate managerial contacts.³⁷

Use of the term "span of control," is widespread and frequently appears in textbooks on administration and in the works of authors discussing administrative and organizational matters. While there is complete unanimity as to the existence of this principle and the inherent difficulties which lie in the effective supervision of functions which have been delegated broadly, there is not complete agreement among authorities as to the number of subordinates which should report to a single superior.

Sir Ian Hamilton expressed this principle and its application as follows:

If a man divides the whole of his work into two branches and delegates his responsibility, freely and properly, to two experienced heads of branches he will not have enough to do. The occasions when they would have to refer to him would be too few to keep him fully occupied. If he delegates to three heads he will be kept fairly busy whilst six heads of branches will give most bosses a ten hours' day. Those data are the results of centuries of the experiences of soldiers.³⁸

Clausewitz, whose concept of the principles of war is classical and who has had profound effect on students of military strategy and tactics, exhibited great interest in organizational concepts. He states:

³⁷Gulick, op. cit., p. 7.

³⁸Sir Ian Hamilton, The Soul and Body of an Army, quoted in Brown, op. cit., p. 125.

202. The author's note

in several cases indicated the adoption of the Section 2000

which requires a written agreement specifying the nature and amount
of services to be rendered and the compensation to be paid for such services.

192. The author's note

in several cases indicated a plan was made for the author to be paid
a fixed fee of \$1000 for the work to be done for him, and on another occa-

tion the author's note

indicated the author had agreed to a compensation of \$1000 per month for the services

rendered by the author to the author's note

indicated the author had agreed to a compensation of \$1000 per month for the services

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indicated the author had agreed to a compensation of \$1000 per month for the services

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rendered by the author to the author's note

193. The author's note

indicated the author had agreed to a compensation of \$1000 per month for the services

First we must observe that great bodies must be split into more parts than smaller ones, in order to be made sufficiently handy, and that smaller bodies with too many subdivisions or branches are not easy to handle. It is better not to divide an Army into less than 8 parts. If other circumstances require it the number of parts may be increased to nine or ten.³⁹

When authority and responsibility are delegated to a subordinate there are numerous relations which are automatically created -- that of the superior and the subordinate, and that of each subordinate with each other subordinate. Graicunas has worked out the complexity of these relationships mathematically.⁴⁰ Urwick in analysis of the work of Graicunas states:

No superior can supervise directly the work of more than five or, at the most, six subordinates whose work interlocks. The reason for this is simple. What is supervised is not only the individuals, but the permutations and combinations of the relationships between them. And while the former increase in arithmetical progression with the addition of each fresh subordinate, the latter increase by geometrical progression. If a superior adds a sixth to five immediate subordinates he increases his opportunity of delegation by 20 per cent, but he adds over 100 per cent to the number of relationships he has to take into account. Because ultimately it is based on the limitations imposed by the human span of attention, this principle is called The Span of Control.⁴¹

While an arbitrary position can not be taken in respect to the number of subordinates to whom authority and responsibility is delegated, it is essential that the administrator recognize the problems and limitations inherent in the delegation of authority and responsibility.

One additional point should be made in reference to the span of control. The span of control and the number of supervisory levels of the organization are interrelated. The smaller the span, the greater number of levels. If the number of levels is too great, communication is impeded, unity is jeopardized and the organization tends to become cumbersome and inflexible.

³⁹Karl von Clausewitz, On War, quoted in Brown, op. cit., p. 124.

⁴⁰Graicunas, op. cit., pp. 183-187.

⁴¹Urwick, op. cit., p. 53.

What should be recognized in the application of this principle is that numerous factors or variables such as the degree of similarity or dissimilarity in the work, the extent to which work can be measured, the capacity of the superior and subordinate and the complexity and number of functions which are delegated have a bearing on the degree of supervision and coordination which is necessary. What can be stated is this: The more complex, important and diverse becomes the work of subordinates, the greater the degree of confusion and indirection which may result and the greater the need for effective supervision and coordination.

Delegation

To delegate is to entrust to the care or management of another. Delegation is a process whereby authority, responsibility and accountability are distributed or parceled out to subordinate members of an organization. Delegation as a principle of organization is present in every form and type of group endeavor. Delegation is a means by which work is divided and assigned and by which results are achieved. Attainment of an objective would not be possible in any significant group undertaking if the element of delegation were not present. Furthermore, failure to apply this principle appropriately because of omission, duplication, failure to specify and define or by undue restriction can be a fundamental cause of management problems.

Delegation as a principle of organization is inseparably linked, and perhaps indistinguishable, from the scalar, the span of control and the functional principles. A consideration of this matter will indicate that the scalar principle is a delegation of responsibility and authority by levels in a vertical manner throughout an organization, that the span of control implies a delegation of authority and responsibility in a horizontal manner, and that the functional principle pertains to the grouping and assignment of

tasks which are delegated. The line of demarkation between delegation and the principles previously discussed may be nonexistent in that these principles may be but subordinate parts of the entire matter of delegation and are merely different methods of applying one fundamental principle. In fact Lepawsky indicates that there are but two useful and tested precepts of organization and includes the concept of "unity of command" which requires every member of an organization to be responsible to only one superior, following the theory that a man can not serve more than one master, and the precept of "delegation of responsibility" which requires a clear-cut assignment of duties to subordinate individuals.⁴²

Davis looks on delegation in terms of the division and placement of authority. These matters of division and placement are very closely related to the principles of specialization and decentralization. Davis has this to say about delegation:

A delegate is a person who is appointed to represent and act for another . . . The process of delegation is one whereby certain of the executive's functions, responsibilities and authority are released and committed to designated subordinate positions. The appointment of an individual to a job and his acceptance of the obligations associated with it entitle him to use the corresponding authority for the duration of his appointment. . . Delegation enables the principal executive to extend his abilities beyond the limits of his personal powers. It makes it possible for an executive to accomplish successfully a mission that exceeds many times his immediate, personal limits of time, physical energy, and knowledge. The delegations of responsibility and authority usually are made simultaneously, since the latter is a derivative of the former.⁴³

There are several facets to the principle of delegation which merit recognition. It has long been a tradition in military affairs that responsibility can not be delegated. The commanding officer of a ship is master and this unitary authority bears full responsibility for the acts of all subordi-

⁴²Albert Lepawsky, Administration (New York: Alfred A. Knopf, 1949), p. 413.

⁴³Ralph C. Davis, The Fundamentals of Top Management (New York: Harper and Brothers, 1951), p. 293.

nates and the safety of his ship. This view is commonly held. Mooney has this to say about delegation:

Delegation means the conferring of a specified authority by a higher authority. In its essence it involves a dual responsibility. The one to whom responsibility is delegated becomes responsible to the superior for doing the job, but the superior remains responsible for getting the job done. This principle of delegation is the center of all processes in formal organization. Delegation is inherent in the very nature of the relation between superior and subordinate. The moment the objective calls for the organized effort of more than one person, there is always leadership with its delegation of duties.⁴⁴

To Mooney, delegation is a one-way street in the sense that authority but not responsibility may be delegated. Brown also holds to this same view and after an extensive discussion of the delegation of responsibility concludes "a principal does not, by delegation, divest himself of responsibility."⁴⁵

It is the opinion of the writer that responsibility can and must be delegated and that many positions in an organization should be given a degree of autonomy. The organization which does not delegate limits its effectiveness to the abilities and energies of a few men. Perhaps in an ultimate sense responsibility cannot be completely delegated but certainly this element can be transferred to the extent that a subordinate feels a great responsibility and proceeds on the basis that a responsibility is individual rather than joint.

Another facet of delegation is the matter of subdelegation. If a function which is broad is delegated, undoubtedly there will be a subdelegation of part if not all of the function in question. An alternative to this subdelegation would be to divide the function and delegate each part separately to different individuals. The issue which is raised is that of

⁴⁴Mooney, op. cit., p. 17.

⁴⁵Brown, op. cit., p. 35.

subdelegation vs. an increase in the span of control. Delegation exists by either means but the results are not the same. In one instance performance will be at a level removed from the superior; in the other instance the necessity for supervision rests with the superior. The point is made that either of these opposing methods can be carried to an absurdity and that an enlightened administrator will recognize that these two methods exist, are in opposition, and that a measure of balance and consonance between the two should be established.

Delegation is a transfer or grant of authority or responsibility, and that which has been granted may be recaptured.

An additional aspect of delegation is that of the necessity for supervision of that which has been delegated. If authority and responsibility are delegated it is the opinion of most authors that there is imposed upon the superior a duty to supervise, to review, and to evaluate the performance of the delegee, and it is this element of supervision which poses some serious and nebulous problems. To what extent should supervision be exercised? It is only pointed out that there can be such a thing as too much supervision as well as too little supervision and that either in the extreme is undesirable and conducive to a loss of efficiency and good relations. There are so many variables in this important matter that intuition may be the only guide.

Delegation as a principle is the very essence of good organization and administration and the principle is as broad and universal as group endeavor. In summary the following essentials seem to be pre-eminent.

1. Authority should be commensurate with responsibility.
2. Delegation of authority and responsibility should be accompanied by clear and well defined limits in order that no misunderstanding results.
3. Effective administration requires a proper balance between that which is delegated and that which is retained. It is as grievous

to delegate too much as too little. Too much delegation can be a disaster and too little delegation can be a catastrophe.

Line and Staff

A term or concept commonly used in referring to principles of organization is that of "line and staff." The term has several shades of meaning and is variously used to describe a type of organizational arrangement or a type of duty or kind of service that is rendered. In other instances the meaning which is ascribed refers to a relationship which exists between components of an organization or to the relationship existing between members within a group. These concepts indicated by the term probably have existed since people first engaged in coordinated effort. It appears that the term was first used in the eighteenth century and applied, in a collective sense, to all military officers who were in direct contact with their commander-in-chief. Admittedly the staff conception has been borrowed from military life where the term is used in a dual sense. The wider sense applies to specialized troops and services. The narrow meaning refers to selected officers who assist a commander in carrying out the functions of his command. In army organization these two groups have different functions and relationships.

How is group effort to be combined and organized? In terms of purpose, major process, by clientele or by type of material, by place, by function or by some other measure? In essence three basic types of organization are in existence: (1) the line organization; (2) the functional organization; and (3) the line and staff organization. Some authorities would add a fourth type -- that of committee. A line organization is based on relative authority and responsibility. In a line organization authority flows directly down from one level to another and each recipient of authority is responsible to the next superior directly in line. The organization is held together by levels of authority rather than by the nature of the duty or function performed.

A functional organization is one which has developed in terms of the kind of activity or group of related activities which are performed. Each executive is responsible for a function and is entrusted with authority to supervise and direct assigned personnel who perform the respective function. The functional organization is an application of specialization. Specialists become executives in charge of functions. There are distinct advantages and pronounced disadvantages in each type of organization when it exists in pure form. A line and staff organization is one which contains elements of both the line type and the functional type. Historically the line and staff type is an outgrowth of the line type. Throughout such an organization there exists a line of command and authority which extends downward. To assist line executives in discharging their duties there is a staff of functional specialists whose job is to furnish specialized or advisory service and to advise and assist the executives.

Mooney distinguishes between the line and staff on the basis of functions performed.

Staff service in organization means the service of advice or counsel, as distinguished from the function of authority or command. This service has three phases which appear in a clearly integrated relation: the informative, the advisory, and the supervisory. The informative phase refers to those things which authority should know in framing its decisions; the advisory, to the actual counsel based on such information; the supervisory, to both preceding phases as applied to all the details of execution. The point is that the line represents the authority of man; the staff, the authority of ideas. The staff is purely an auxiliary service. Its function is to be informative and advisory with respect to both plans and their execution. This is implicit in the word "staff" which is something to support or lean upon but without authority to decide or initiate.⁴⁶

While a number of writers emphasize that the relation of the staff to other departments is advisory, other writers conceive of a staff in terms of specialization. To Taylor the dominating idea is that of specialization and

⁴⁶Mooney, op. cit., pp. 33-34.

any function which is specialized may apparently become a staff function.⁴⁷

Brown feels that there is no clear distinction between line and staff and that any distinction depends upon particular circumstances of administration.⁴⁸

The matter of relationship between line and staff is the aspect of line and staff which is potentially most provocative and which is discussed most frequently by writers on organization, administration and management. It is essential that the functions performed by a staff and the relationship of a staff to other parts of an organization be clearly defined. The following appears to summarize the best that has been written in the field of organization and administration in respect to line and staff relationships.

Four cardinal principles enter into an understanding of the relationship between line and staff.

1. Line and staff are jointly responsible for performance.
2. A staff officer discharges his responsibility by furnishing information and advice which he makes available to the line officer unselfishly and without thought of personal credit for the results accomplished.
3. Although staff executives are charged with responsibilities that have to do with internal administrative phases of the work in their own departments, this does not give them direct authority over the line forces in subordinate organization strata, nor does it relieve their line superiors of the basic responsibility for the results of their work.
4. The line recognizes the purpose and value of the staff and makes for full use of its advice and assistance. In order that the line may properly do so the staff must create for itself an authority of ideas, and must, by competence and tact, obtain and justify the line's confidence.⁴⁹

The essential elements of line and staff classification and the point that should be remembered by an administrator is stated in nutshell fashion by Gulick.

The chief value of the line and staff classification is to point to the need (1) of developing an independent planning agency as an aid

⁴⁷Taylor, op. cit., passim.

⁴⁸Brown, op. cit., p. 166.

⁴⁹E. W. Smith, Handbook of Business Administration.

to the chief executive, and (2) of refusing to inject any element of administrative authority and control into such an agency.⁵⁰

⁵⁰Gulick, op. cit., p. 31.

CHAPTER III

CONCLUSION

In the readings which accompanied preparation of this discussion the writer has been impressed by several aspects of the subject. In the first place there seems to be a lack of agreement as to what constitutes a principle of organization. To some authors a principle is a broad fundamental law that treats and explains a relationship of cause and effect. At the other extreme a principal can be a very specific and practical rule for proper operational conduct. Between the two there are several ways in which the principles of organization have been approached. There is, however, a fairly well defined body of truth or precepts or fundamentals which have guided administrators in the coordination of group effort since the beginning of time. The best summary which the writer has encountered, and which serves to outline the fundamental ideas and concepts inherent in effective organization, is a series of questions relating to organization compiled by Rilley. He indicates that this list is based on extensive experience and on heavy reliance on other students of the subject, and states: "Most of the principles are as well known to executives as the Ten Commandments and as frequently broken."

1. Has a specific provision been made for the supervision of all essential activities?
2. Have any functions been assigned to more than one unit in the organization?
3. Have the responsibilities of any member of the organization become too numerous and complex to be handled effectively by a single individual?
4. Have responsibilities been properly classified when they are grouped under any individual?
5. Are the responsibilities assigned to each individual clearly defined and thoroughly understood?

6. Does each executive have authority commensurate with his responsibility?
7. Has authority been delegated to the greatest extent possible, consistent with necessary control, so that coordination and decision can take place as close as possible to the point of action?
8. Do executives have more subordinates reporting to them than they can supervise and coordinate effectively?
9. Does each member of the organization know to whom he reports and who reports to him?
10. Do some individuals in the organization report to more than one supervisor -- or to none?
11. Is the organization structure recognized by executives in dealing with subordinates?
12. Are the number of levels of authority, or links in the chain of command, kept at a minimum?
13. Do top executives exercise control through attention to policy and problems of exceptional importance rather than review of routine operations of subordinates?
14. Are the distinctions between line and functional authority and staff work recognized?
15. Is the basic pattern of the organization best adapted to the job at hand?
16. Has adequate provision been made for coordination of related activities?
17. Has the organization been kept as simple as possible?⁵¹

Another aspect of this matter of organization which has interested the writer is the matter of attributes of good organization as distinct from the principles which bind it together. In an ultimate sense the purpose of organization is to get a job done, to attain an objective, or to achieve a reward. While a good organization and a successful organization are compatible, they are not necessarily identical. Many poor organizations have prospered and many good organizations have been unsuccessful. As a consequence, compliance with the principles of good organization does not necessarily insure success or attainment of an objective. What can be said without equivocation is that adherence to principles of good organization will assist in obtaining an objective, will facilitate effective administration, will reduce burdens and confusion and will promote effective control.

⁵¹E. W. Rilley, "Sound Organization - Keystone of Management Development," The Development of Executive Talent, ed. by M. Joseph Docher (New York: American Management Association, 1953), pp. 43-46.

—Inaugurating this new system of government, and evidence of their success
—The new system of government, after so long and protracted a period of
negotiations and difficulties, and of so many changes in the political situation.

—That as the existing state of affairs, in India, is really most
unjust, most cruel and most oppressive, that it is the duty of every member of
the new legislature, of every officer of every administration, and of every functionary, from
the lowest to the highest, to do his best to bring about a change in the existing
system, and to assist every one of his colleagues and compatriots in his efforts to do the same.

—That the new system of government, which has been adopted, is the best
possible system of government, because it is based on the principles of
justice, of equality, of freedom, and of the right of the people to govern
themselves. That the new system of government, which has been adopted, is the best
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themselves.

If compliance with principles of good organization is not mandatory and these principles are not inviolate and sacrosanct, perhaps the criteria which should be applied is that of attributes rather than adherence to principle. The best discussion in the area is considered to be that of Davis, who is an authority on business management. He lists the following ten attributes of a good organization.

1. Effective executive leadership.
2. Sound objectives and policies.
3. Sound functional relationships as determined by objectives.
4. Adequate physical implementation which will make possible an economical and effective accomplishment of objectives.
5. A complement of abilities.
6. Organizational stability.
7. Organizational flexibility.
8. Organizational capacity for growth.
9. Organizational balance.
10. Good organizational morale.⁵²

There is one final impression regarding this matter of organization which bears brief discussion. This may, more appropriately, be a matter of administration rather than of organization but is a fundamental concept which has been obtained in the preparation of this paper. In large part good administration is a matter of knowledge and awareness. The best administrator is one who makes the fewest mistakes. A mistake can arise from lack of knowledge or because of unawareness. Decisions in regard to organization should be made in terms of knowledge and awareness and in terms of the probable direct and indirect consequences. If an established principle of organization is to be violated, let it be by design and intent and not unwittingly.

⁵²Davis, op. cit., p. 801.

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